

# International Conference on Chemical Safety & Security for Health & Environment (ICCSHE 2023)

## Technical Programme

**Day 1 – December 8, 2023**

9:00-10:00AM	Registration	
10:00-11:00AM	Inauguration	<ul style="list-style-type: none"> <li>• Welcome Remarks and Greetings</li> <li>• Introduction of the Invited Guests</li> <li>• Aims and Objectives of the Conference</li> <li>• Addresses by the Organisers / Guests</li> <li>• Launching of NACS Curriculum</li> </ul>
<b>11:00-11:30AM</b>		<b>Tea Break</b>

Time	Session	Topic
<b>11:30-1:30PM</b>	<b>Technical Session I</b>	<b>Knowing Chemistry for Planet Protection Chair: Mr. Ron Orzel, ANL, USA</b>
11:30-12:00PM	L1	Plenary Presentation Ms. Neelkamal Darbari Ex. Chairperson, NACWC, New Delhi
12:00-12:30PM	L2	Chemistry for People and the Planet: Integrating Sustainability, Security, and Safety into Chemistry Education Peter G. Mahaffy, The King's University, Canada
12:30-1:00PM	L3	Integrated Learning of Chemical Safety, Security and Sustainable Development for Planet Protection Dr. Murty M.R.V.S. Former Staff and Consultant, OPCW, The Netherlands
1:00-1:30PM	L4	Chemical Management Dr. Ahmed Fahmy Youssef Cairo University, Egypt
<b>1:30-2:30PM</b>		<b>Lunch Break</b>
<b>2:30-4:00PM</b>	<b>Technical Session II</b>	<b>Non-proliferation Issues Chair: Ms. Neelkamal Darbari, Ex Chairman, NACWC</b>
2:30-3:00PM	L5	Overview of Non-proliferation Issues Ms. Tobi Du, ANL, USA
3:00-3:30PM	L6	Introduction to Non-proliferation Issues Mr. Ron Orzel, ANL, USA
3:30-4:00PM	L7	International Framework for Dual-Use Chemicals Ms. Amanda Owen, ANL, USA
<b>4.00-4:30PM</b>		<b>Tea Break</b>

### Parallel Session-III A

<b>4:30-5:30PM</b>	<b>Technical Session IIIA</b>	<b>Chemical Safety &amp; Security</b> <b>Chair: Dr. B. N. Acharya, Scientist, DRDE</b>
4:30-5:00PM	L8	Surface Stabilization and Decontamination of Hazardous Radioactive Materials Using Strippable Coatings Dr. Pankaj Kumar Sharma, CFEES, New Delhi
5:00-5.30PM	L9	Chemical Safety, Security for Health and Environment Dr. S.P. Gandhi, GFL Limited, Gujarat

### Parallel Session-III B

<b>4:30-5:30PM</b>	<b>Technical Session IIIB</b>	<b>Advances in Science &amp; Technology-I</b> <b>Chair: Dr. Santasabuj Das, Director, NIOH</b>
4.30-5:00PM	L10	Waste to Value Processes & Technologies and their Influence on Environment: Case studies of CSIR-CSMCRI Dr. Kannan Srinivasan, CSMCRI, Bhavnagar
5:00-5.30PM	L11	Metabolomics as an Emerging Tool to Understand the Chemical Risk/Safety of Pesticides in Various Model Organisms Dr. Mohana Krishna Reddy Mudiam, IPFT, New Delhi

### Panel Discussion

<b>5:30-6:30PM</b>	-	<ul style="list-style-type: none"><li>• <b>Ms. Julia Randels, CRDF Global, USA</b></li><li>• <b>Dr. Rajdip Roy, RSC, UK</b></li><li>• <b>Panel Discussion – Experts from Industry, Regulatory Authority and Academia</b></li><li>• <b>Conclusion</b></li></ul>
--------------------	---	--

<b>10:00AM-5:00PM</b>	<b>Students Poster Presentation Competition</b> <b>PP-1 to PP-31</b>
-----------------------	---

## Day 2 – December 9, 2023

<b>Time</b> <b>9:30-11:00AM</b>	<b>Technical</b> <b>Session IV</b>	<b>Chemical Safety and its management</b> <b>Chair: Dr. Arti Bhatt, Associate Director, CFEES</b>
9:30-10:00AM	L12	Safe Work Culture Dr. Mahender Rao Siripragada President R&D, Neuland Laboratories Ltd., Hyderabad
10:00-10:30AM	L13	Dr. P. Manoharan Ex. President, National Safety Council, Chennai
10:30-11:00AM	L14	Chemical Safety and Accident Risk Management - Complexities, Recent Contexts and Strategic Future Directions Dr. Anil Kumar Gupta, NIDM, New Delhi
<b>11:00-11:30AM</b>		<b>Tea Break</b>
<b>11:30-1:30PM</b>	<b>Technical</b> <b>Session V</b>	<b>Interdisciplinary and Earth Science</b> <b>Chair: Dr. Jagvir Singh, Advisor, MoES</b>
11:30-11:45AM	L15	Plastic Litter and Microplastics: An Emerging Contaminant in the Marine Environment Dr. Pravakar Mishra, NCCR, Chennai
11:45-12:00PM	L16	Waste Management, Recycling Dr. Vijay Kumar Soni, EMRC, New Delhi
12:00-12:15AM	L17	Environmental Performance of Yarn made from Virgin Cotton Vs Recycled Cotton: An LCA Case Study Dr. Madhuri Nigam, University of Delhi, New Delhi
12:15-12:30PM	L18	Navigating India's Waste Landscape: Urgency, Challenges, and the Role of NGOs in Behaviour Change Dr. Bhairavi Joshi, Tayyaram Foundation, Gujarat
12:30-12:45PM	L19	Measuring, Managing, and Minimising Carbon Footprints: Innovative 'Carbon Zero' App Concept Ms. Diksha Singh, Karnavati University, Ahmedabad
12:45-1:00PM	L20	From Waste to Wellness: Digital Innovative App Solution Reshaping India's Food Landscape Ms. Tanaya Naik, Karnavati University, Gandhinagar
1:00-1:30PM	-	Summary & Conclusions Dr. Jagvir Singh, Advisor, MoES, New Delhi
<b>1:30-2:30PM</b>		<b>Lunch Break</b>

### Parallel Session-VIA

<b>2:30-4:00PM</b>	<b>Technical Session VIA</b>	<b>Advances in Science &amp; Technology-II Chair: Dr. S. Mahender Rao, R&amp;D President, Neuland Laboratories</b>
2:30-3:00PM	L21	Sensors for Environmental Monitoring Prof. Shaibal Mukherjee, IIT, Indore
3:00-3:30PM	L22	Designing Organocatalyst- Exploiting Spatial Directionality of Resorcin[4]arene for Catalysis in Aqueous Environments Dr. Kirpal Singh Bisht, University of South Florida, USA
3:30-4:00PM	L23	Catalysis for Safe and Clean Production of Chemicals Dr. R. V. Jasra, Reliance Industries Ltd., Vadodara
<b>4:00-4:30PM</b>		<b>Tea Break</b>

### Parallel Session-VIB

<b>2:30-4:00PM</b>	<b>Technical Session VIB</b>	<b>Waste Management and Pollutants Chair: Dr. Subrat Sharma, Dean, University of Ladakh</b>
2:30-3:00PM	L24	Waste Management and Recycling. Dr. Bharat Jain, GCPC, Gujarat
3:00-3:30PM	L25	Status of Emerging Pollutants in India. Dr. J. I. Nirmal Kumar, ISTAR, Vallabh Vidyanagar
3:30-4:00PM	L26	Dr. Lakshi Saikia, NEIST, Jorhat
<b>4:00-4:30PM</b>		<b>Tea Break</b>

<b>4:30-5:30PM</b>		<b>Discussions and Conclusions</b>
--------------------	--	------------------------------------

### Parallel Session: Students Oral Presentation Competition

Chair: Dr. K. Ravindranath, NACS, India

<b>9:30-11:00AM</b>		<b>Students Oral Presentation Competition OP-1 to OP-7</b>
<b>11:00-11:30AM</b>		<b>Tea Break</b>
<b>11:30-1:30PM</b>		<b>Students Oral Presentation Competition OP-8 to OP-16</b>

<b>10:00AM-5:00PM</b>		<b>Students Poster Presentation Competition PP-32 to PP-62</b>
-----------------------	--	--

### Day 3 – December 10, 2023

<b>Time</b> 9:30-11:00AM	<b>Technical Session VII</b>	<b>Chemical Security – Toxic Chemicals</b> <b>Chair: Prof. V. K. Jain, President, NACS</b>
9:30-10:00AM	L27	Chemical Security: The Role of Maturity Models Dr. Radha Kishan Motkuri, PNNL, USA
10:00-10:30AM	L28	Detection of Toxic Chemicals: An Overview Dr. B. N. Acharya, DRDE, Gwalior
10:30-11:00AM	L29	Unveiling the Invisible: The Toxic Signatures of Everyday Chemicals Dr Astha Pandey, NFSU, Gujarat
<b>11:00-11:30AM</b>		<b>Tea Break</b>
<b>11:30-1:30PM</b>	<b>Technical Session VIII</b>	<b>Emergency Planning &amp; Management</b> <b>Chair: Dr. G. V. M. Sharma</b>
11:30-12:00PM	L30	Chemical Accident and its Associated Impact on Environment Mr. Arun Patel/ Mr. Irfan Kagzi, GPCB, Gujarat
12:00-12:30PM	L31	Emergency Response and Control Planning in a Chemical Unit Mr. Vijayinder Singh, Opal, Gujarat
12:30-1:00PM	L32	Dr. R. Narayanan Advisor, ICC& In-charge Regional CWC Helpdesks
1:00-1:30PM	L33	Food Waste - Nature's Periodic Table Dr. Avtar S Matharu (Online) Dept. of Chemistry, University of York, England, UK
<b>1:30-2:30PM</b>		<b>Lunch Break</b>
<b>2:30-3:30PM</b>		<ul style="list-style-type: none"> <li>• <b>Presentation of Awards</b></li> <li>• <b>Closing Ceremony</b></li> </ul>